



ORIGINAL ARTICLE

Investigation of the Effect of Black Pepper Powder on Microbiological and Physicochemical Properties of Processed Cheese

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(Received: 12 October 2019

Accepted: 3 February 2020)

KEYWORDS

Flavoring Agents;
Cheese;
Piper Nigrum;
Food Preservation

ABSTRACT: The recent tendency in cheese production is to produce flavored cheese using natural flavoring materials with nutritional and high-quality microbial value for human consumption. This research is aimed at investigating the microbiological and physicochemical properties of processed peppery cheese. Samples were kept under the three temperatures of 6, 25 and 37°C; microbial and physicochemical evaluations were performed on the samples immediately after being produced, after the end of each month from the production date until 4 months, and one month after the expiration date. The test was performed using a sample of processed cheese without pepper powder. The used plan was quite random, and it was repeated for 3 times in every treatment. The results of physicochemical analyses of peppery cheese compared to the control sample indicated that the peppery cheese had lower changes in pH, dry matter content and texture during the period of being kept under different temperatures and less microbial contamination was observed in it compared to the control cheese. The obtained results showed that the peppery cheese could keep the product quality better than the control cheese under different time and temperature conditions of treatments while highly controlling the changes in the chemical and microbial factors.

INTRODUCTION

Cheese is a type of dairy product which is widely produced by using hundreds of different types of milk. Cheese is made of the coagulation of milk, usually cow, buffalo, camel, goat and sheep milk.

Milk is made sour (acidic) with the help of bacterial culture. Afterwards, it is coagulated by adding a rennet enzyme or an alternative material (such as

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DOI: 10.22034/jchr.2020.1880906.1055